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DATA REVIEW NUMBER: ES-VII-W-1

TEST: One-Generation Reproduction Study - Mallard Duck

SPECIES: Mallard Duck (Anas platychynchos)

RESULTS: Investigator concluded that neither the 63.1% tricosene or the 94.7% tricosene present a reproductive hazard when present in diet at 0.1 ppm. No effects were noted on the reproductive success of the birds and no effects were noted on body weight gain or food consumption.

ADDITIONAL RESULTS:

Reproductive Success Data

| | | Z-9-Tricosene(ppm) | | Normal Expected (From guideline) |
|--------------------------------------------------|----------------|--------------------|-------------------|----------------------------------------|
| | <u>Control</u> | <u>0.1(94.7%</u> | <u>0.1(63.1%)</u> | |
| Eggs laid per hen (8 wks) | 36.4 | 37.3 | 38.2 | 28-38(10 wks) |
| Eggs cracked of eggs laid (5) | 1.6 | 1.2 | 1.2 | 0.6-6 |
| Live 3 wk embryos of viable eggs (5) | 98 | 98 | 99 | 85-98 |
| Normal hatchlings of live 3 wk embryos (%) | 69 | 64 | 70 | 50-90 |
| 14 day old survivors of normal hatchlings (%) | 99 | 99 | 99 | 94-99 |
| 14 day old survivors per hen | 22.1 | 21.0 | 23.4 | - |
| Mean shell thickness mm (40 birds examined) | 0.35 | 0.341 | 0.346 | 0.31-0.33 |

CHEMICAL: (a) Z-9-Tricosene, No. 046113, (16d), 63.1%
(b) Z-9-Tricosene, No. 189-017, (16e), 04.7%

TITLE: One Generation Reproduction Study - Mallard Duck Z-9-Tricosene
Final Report.

ACCESS:ION NO: 229393

STUDY DATE: August 28, 1975

RESEARCHER: Wildlife Res. Div., Truslow Farms, R. Fink



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DATA REVIEW NUMBER: ES-VII-W-1 (Con't.)

REGISTRANT: Zoecon Corp.

VALIDATION CATEGORY: Core, pending clarification

CATEGORY REPAIRABILITY: NA

ADDITIONAL INFORMATION: Photo period for first seven weeks was 5 hrs. light/day, increased to 17 hrs. light/day at eighth week plus increased 15 mins./week throughout remainder of study (14 weeks). Study was initiated February 2, 1975. Temperature in research facility was allowed to fluctuate with the outdoor temperature for first seven weeks, thereafter the temperature was raised to and maintained at 50°F.

Feed was mixed at test initiation and then frozen for use throughout the study. Body weights recorded only at test initiation and end of study.

This study was conducted in an effort to clarify an avian reproduction hazard suggested by a previous Mallard reproduction study which revealed impairments at 2 and 20 ppm. It has been suggested that 0.1 ppm is a more realistic toxicant concentration likely to be encountered by the species at risk.